M970D Rugged Tablet PC

(Intel® Atom Duo Core N2600 Based Tablet PC)

USERS MANUAL

Version: 1.3

M970D 9.7″ Compact Rugged Tablet PC

IMPORTANT SAFETY INSTRUCTIONS

Please read these instructions carefully before using the product and save for later reference.

Follow all warnings and instructions marked on the product.

Unplug this product from the wall outlet before cleaning. Clean the product with a damp soft cloth. Do not use liquid or aerosol cleaners as it may cause permanent damage to the screen.

Do not use this product near water.

Do not place this product on an unstable cart, stand, or table. The product may fall, causing serious damage to the product.

This product should be operated from the type of power indicated on the marking label. If you are not sure of the type of power available, consult your dealer or local power company.

This product is equipped with a 3-wire grounding type plug, a plug having a third (grounding) pin. This plug will only fit into a grounding-type power outlet. This is a safety feature. If you are unable to insert the plug into the outlet, contact your electrician to replace your obsolete outlet. (For AC version only)
Do not defeat the purpose of the grounding-type plug.

Do not allow anything to rest on the power cord. Do not locate this product where persons will walk on the cord.

Never push objects of any kind into this product through cabinet slots as they may touch dangerous voltage points or short out parts that could result in a risk of fire or electric shock. Never spill liquid of any kind on the product.

Do not attempt to service this product by yourself, as opening or removing covers may expose you to dangerous voltage points or other risks and will void the warranty. Refer all servicing to qualified service personnel.

Unplug this product from the wall outlet and refer servicing to qualified service personnel under the following conditions:

When the power cord or plug is damaged or frayed.

If liquid has been spilled into the product.

If rainy or water has been exposed to the product.

If the product does not operate normally that the operating instructions are followed. Adjust only those controls that are covered by the operating instructions since improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the product to normal operation.

If the product has been dropped or the cabinet has been damaged.

If the product exhibited a distinct change in the performance, that indicates a need for service.

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Warranty

Winmate warrants that each of its products will be free from material and workmanship defects for a period of one year from the invoice date. If the customer discovers a defect, Winmate will, at its option, repair or replace the defective product at no charge to the customer, provided it is returned during the warranty period of one year, with transportation charges prepaid. The returned product must be properly packaged in it′s original packaging to obtain warranty service.

If the serial number and the product shipping data differ by over 30 days, the in-warranty service will be made according to the shipping date. In the serial numbers the third and fourth two digits give the year of manufacture, and the fifth digit means the month (e. g., with A for October, B for November and C for December).

For example, the serial number 1W08Axxxxxxxx means October of year 2008.

Customer Service

We provide service guide for any problem as follow steps：First, visit the website at http://www.winmate.com.tw to find the update information about the product. Second, contact with your distributor, sales representative, or our customer service center for technical support if you need additional assistance. You may have the following information ready before you call：

- **Product serial number**
- **Peripheral attachments**
- **Software (OS, version, application software, etc.)**
- **Description of complete problem**
- **The exact wording of any error messages**

In addition, free technical support is available from our engineers every business day. We are always ready to give advice on application requirements or specific information on the installation and operation of any of our products. Please do not hesitate to call or e-mail us.

Notice

1. **Do not touch the LCD panel surface with sharp or hard objects.**
2. **Do not use abrasive cleaners, waxes or solvents for cleaning, use only a dry or damp, soft cloth.**
3. **Use only with a high quality, safety-approved, AC/DC power adapter.**

Safety Precautions

l Warning!

Always completely disconnect the power cord from your chassis whenever you work with the hardware. Do not make connections while the power is on. Sensitive electronic components can be damaged by sudden power surges. Only experienced electronics personnel should open the PC chassis.

l Caution!

Always ground yourself to remove any static charge before touching the CPU card. Modern electronic devices are very sensitive to static electric charges. As a safety precaution, use a grounding wrist strap at all times. Place all electronic components in a static-dissipative surface or static-shielded bag when they are not in the chassis.

Packaging List

This product is shipped with the items list below. Please make sure that all are in your package.

Item	Description	Note
Default Packing Accessories		
1	1 piece of Rugged Tablet PC Quick Start Guide.	
2	1 piece of CD for Recovery CD for Operation System (Windows embedded standard 7).	
3	1 piece of CD for M970D Manual & Driver	
4	1 piece of 12V Adapter w/ Standard Power Cord. (Euro / U.S. Std type, 1.8m)	
5	LAN (female) Adapter cable	
Optional Accessories		
1	Docking	For charging / USBx2 / VGA out / LAN
2	HDMI (female) Adapter cable	
3	Hand Strap	
4	Capacitive Touch Stylus	
5	VESA Mounting Kit	
6	Vehicle charger	
7	Charging Cart	Maximum charge 30pcs
8	Holster	

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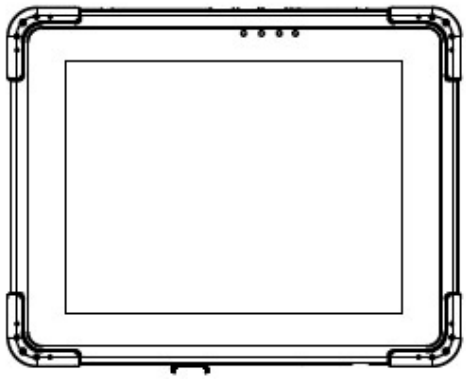
CHAPTER 1

Getting Started



CHAPTER 1 GETTING STARTED

This chapter guides you to get the Rugged Tablet PC ready for operating.

1.1 Connecting the AC Power

Our tablet PC can operate either on the external AC power adapter or internal battery power. It is suggested that you use AC power when you start up the tablet PC first time.

****Caution**

Use only the AC adapter included with your tablet PC. Using other AC adapters may damage the tablet PC.

1. Plug the DC cord of the AC adapter to the power connector of the tablet PC.

2. Plug the female end of the AC power cord to the AC adapter and the male end to the power electrical outlet.

3. When the AC adapter is connected, the Battery Pack is also under charging. You can check the Battery Status LED indicator to see the currently progress. The indicator turns to green when is fully charged.

(For information on using battery power, see "Chapter 3 The Power Management")

****Caution**

When you disconnect the AC adapter, disconnect from the electrical outlet first and then from the tablet PC. A reverse procedure may damage the AC adapter or the tablet PC.

When unplugging the connector, always hold the plug head. Never pull on the cord.

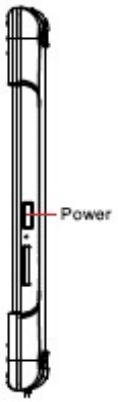
1.2 Turning On and Off the Tablet PC

1.2.1 Turning on the Tablet PC

1. Place your tablet PC on a flat and stable surface or holding the tablet PC on your hand.

2. Make sure that the tablet PC is either connected to AC power or the battery pack with power.

3. Press the power button on the right side by 3 seconds to start it.



1.2.2 Turning off the Tablet PC

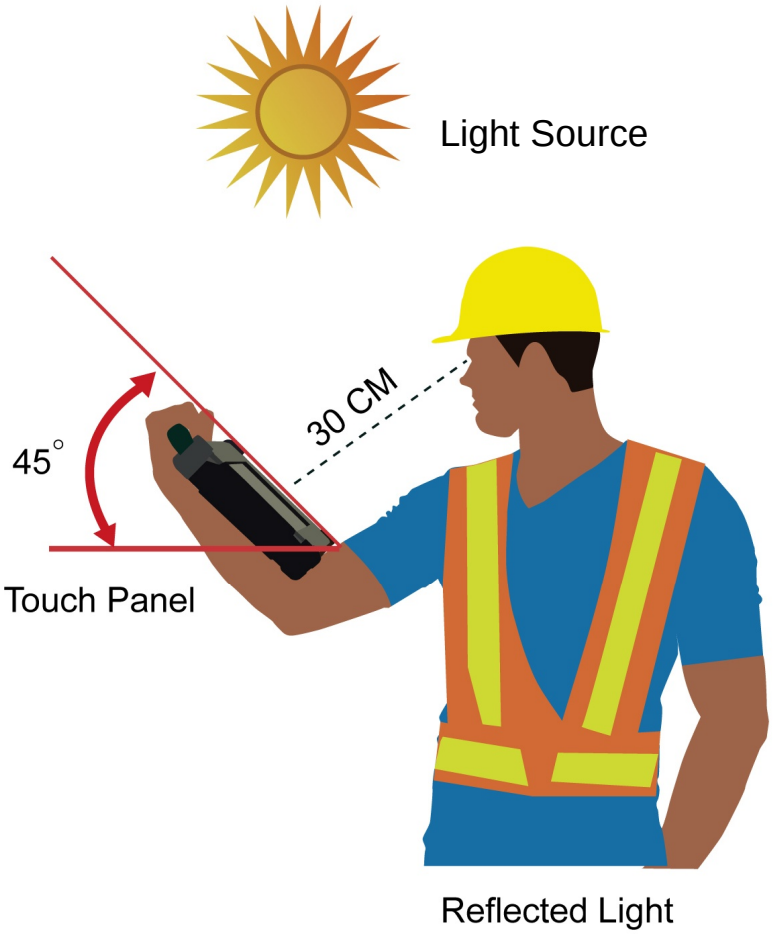
To turn off the tablet PC power, use the "Shut Down" command of your operating system.

**Caution

If you have to turn the tablet PC on again immediately after turning it off, wait for at least five seconds. Turning the tablet PC off and on rapidly can damage it.

1.3 The Optimized Use for Sunlight Readable Touch screen.

With the imposed reflective function, the modified LCD can reflect the ambient light passing the LCD cell and utilize the reflected light beams as its illumination. The stronger the ambient light is, the brighter the LCD will appear. As a result, the modified LCD is viewable under lighting conditions. The optimized angle of view is fourty-five degree. And the optimized distance of view is 30cm.



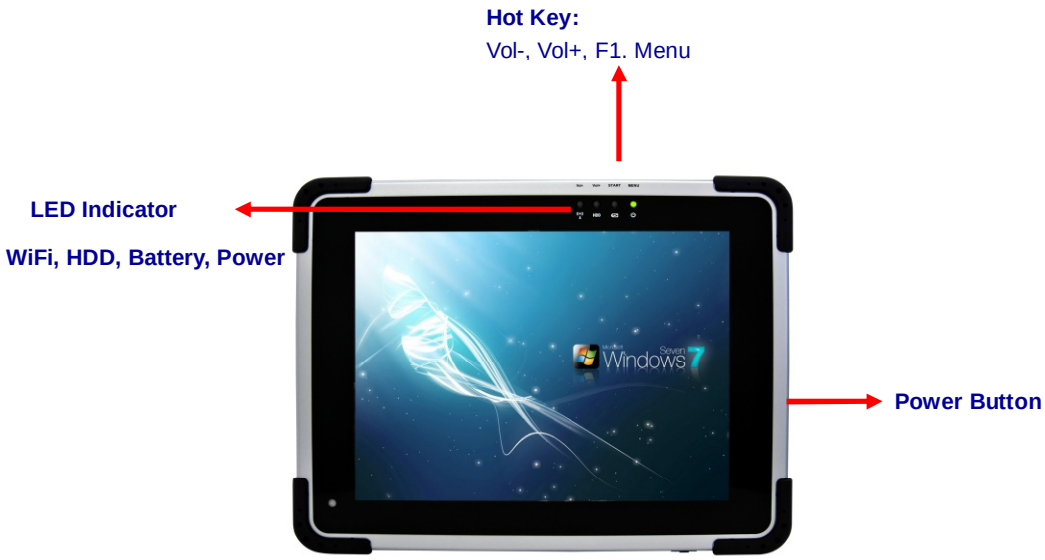
****Caution**

Although transflective LCD is mainly used in outdoor environment and it may increase the reflective lights under sunlight, it is suggested that you should keep the LCD in appropriate temperature for operation and storage, and avoid direct sunlight if possible. To ensure the transflective LCD work stably, 0~50°C (32-121°F) operation and storage temperature is suitable.

1.4 Taking a Look at I/O Functions (for 9.7 inch Tablet PC)

This section we will show the Tablet PC external connection parts and their functions.

Front side Control Functions

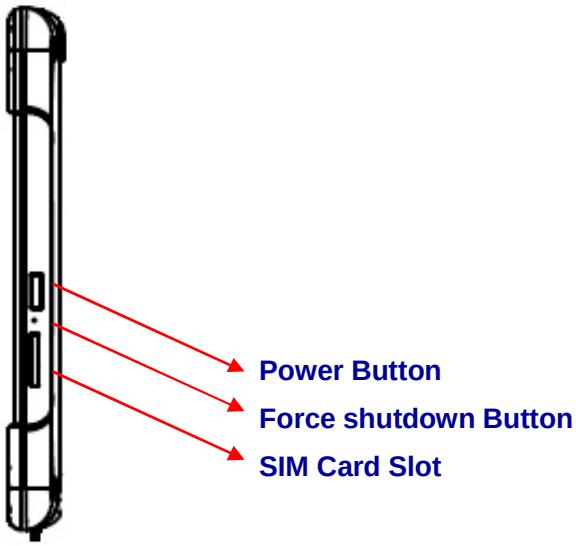


#	Components	Function Description	See Other Intro.
1	Power Button	Press 3 seconds continuous to turn-on the PC. Press once to turn off backlight when PC is on. Press once to tune on backlight when backlight is off Need 8 seconds continuous push to force the Tablet PC turn-off immediately.	
2	LED Indicator	From right to left shows the status about Power mode, Battery mode, Storage and WiFi status mode.	
3	Menu	Push Menu function to show Brightness, Volume,Battery status and WiFi/ Bluetooth on/off.	Chapter 2.2.1
4	Hotkey (F1)	1 programmable Hot-key for user to define by application	Chapter 2.2.2

LED Indicator Status Description

LED Term	Power mode	Battery Status	Storage Status	Wi-Fi Status
LED Indicator				
Indicator Status Description	**Blue light :** when Power On. No light when Power Off.	**Orange Light :** Under charging **Red Blinking Light :** Low Battery Check Chapter 3.2.3 / 2.4 for low battery and replacing battery	**Green light :** when storage under operation. No light when storage stop operation.	**Green light :** when Wi-Fi under operation. No light when Wi-Fi stop operation.

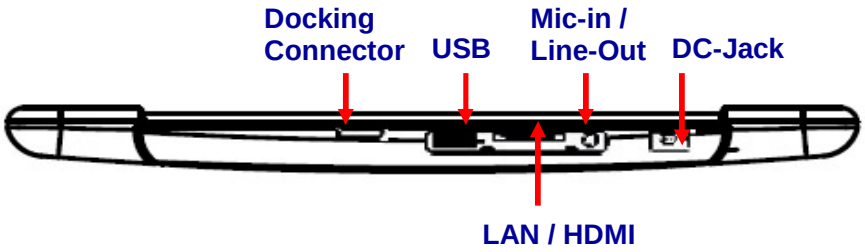
Right side Input



#	Components	Function Description	See Other Intro.
1	Power Button	Press 3 seconds continuous to turn-on the PC.	
2	Force shutdown Button	Press to force shutdown the unit	
3	SIM card slot	To insert the SIM card	

Bottom side Input/ Output

Bottom Side



#	Components	Function Description	See Other Intro.
1	Docking Connector	Connect to the optional docking	
2	USB	Standard USB2.0 port	
3	LAN/HDMI	LAN & HDMI Out combo connecter. Connect with the LAN & optional HDMI cable.	
4	Mic-in/Line-Out	Mic-in for microphone. Line-Out for the external speaker or handset.	
5	DC Jack	DC 12V in	

Through the first Chapter 1.1 to 1.4, you can understand the basic information when you own the machine, in next Chapter you will understand more detail about how to operate the tablet PC. Between this, you can check our product function and specification.

1.5 Product Features and Specification

1.5.2 Product Features

Our Rugged Tablet PCs are designed with state of the art industrial use, versatile functionality and solid products. With great mobility support and battery management. The 9.7″ rugged tablet provides an alternative solution for those between general consumer and extremely rugged application.

- **9.7″ 1024x768 Resolution IPS LED Panel**
- **Low-power system with Intel® Atom N2600 processor**
- **2GB SODIMM DDR3-800 memory**
- **Built-in Wi-Fi/ Bluetooth Module**
- **Support 3G&GPS function (optional)**
- **Standard Battery 5300 mAh**
- **Mobile Rugged- Shock, Vibration, and transit drop**
- 4 **points Projective-capacity touch**

1.5.2 Product Specification

The product specification as the following table description:

System Specification

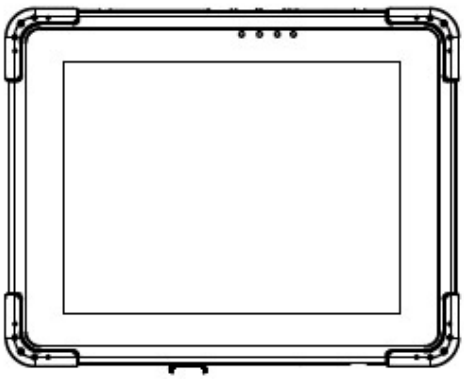
System	
Processor	Intel® Atom N2600 Dual core 1.6GHz
BIOS	AMI System BIOS
System Chipset	Intel® NM10 Chipset
System Memory	2GB SODIMM DDR3-800
LAN Controller	Realtek RTL811B GigaLAN Controller
Storage	mSATA SSD
Audio	Audio out for headset, Micro-in for microphone jack, 1.0W Speaker x2 (Internal)
I/O Connectors	
Bottom I/O Port	Docking Connector x1, Standard USB2.0 port x1, LAN & HDMI Out combo connecter x1, Mic-in/Line-Out x1, DC jack x1
Right I/O Port	SIM card slot x1,
Upper side button	Volume up x1, Volume down x1, Hotkey(F1) x1 , Menu key x1
In Front Control	
LED indicator	From right to left shows the status about Power mode, Battery mode, Storage and WiFi status mode
Display Specification	
Size	9.7 inch
Resolution	1024x768 pixels
Touch	Projective Capacitive (4 points)

System Specification (continues)

Mechanical and Environment	
Weight	988g (w/o accessories)
Operating Temperature	0 deg.C to 50 deg.C
Operating Humidity	30% to 90% (non condensing)
IP Proof	IP54
Mounting	Optional docking / Optional VESA Kit
Shock	Rugged mobile-shock
Vibration	Rugged mobile-vibration
Drop*	4 feets
Certifications	CE, FCC, CCC
Power Management	
Power Input	12V DC
Battery	Standard battery 5300mAh
Operating time	5 Hours
Adapter	100-240V AC in , 50-60Hz, 12VDC output
Wireless Communication	
WLAN	built-in 802.11b/g/n
Bluetooth	built-in Bluetooth
3G	Optional built-in 3G Module
GPS	Optional built-in GPS Module

CHAPTER 2

Operating Tablet PC and HotTab Hotkey Utility



CHAPTER 2 OPERATING TABLET PC AND HOTTAB HOTKEY UTILITY

This Chapter will guide you how to operate the Tablet PC, including start / stop the PC, and how to use menu function including basic hardware function adjustment and the HotTab hotkey utility software that is very easy & helpful for operating the computer.

2.2 Starting and Stopping the Tablet PC

Starting the Tablet PC

You always start the tablet PC using the power button, push the Power Button continuously by 3 seconds to turn on the Tablet PC.

Our Tablet PC will starts up with an operating system (OS) existing on the storage device like the hard disk. The computer will automatically load the OS after you turn it on. This is normal booting process.

NOTE: The operating system is the platform for all software application programs to run on. The Tablet computer is recommended to use the Microsoft Windows embedded standard 7 system for default solution.

Stopping the Tablet PC

When you finish your work, you can stop the tablet PC by turning off the power or leaving the tablet PC in Standby mode:

#	Stop mode	How to do	Start or Resume again
1	Power Off	Following the shutdown process during operating system. The standard process can prevent unsave data loss or damage your software programs.	
2	Sleep (S3)	Under normal operating system, Push the Power Button 0.5 second to go to sleep mode. (push again to wake up the unit)	

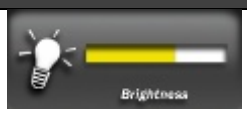
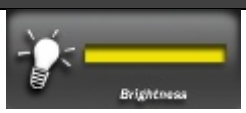
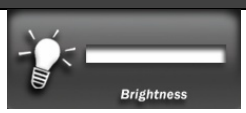
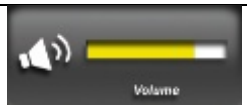
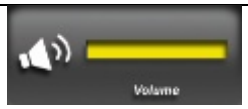
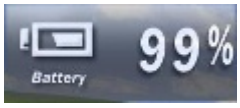
If you choose to stop in Standby mode, you can return to where you left off the next time you start up the tablet PC. (See "Power Management" in Chapter 3 for more information.)

2.2 Quick to Know Menu and HotTab Hotkey Function

This section will introduce you about our easy-of-use function buttons. Our Tablet PC function buttons support very easy way and useful function to adjust Brightness, Volume and watch Battery current status. For programmable Hotkey function can also be defined by user to control by their common use application.

2.2.1 How to use Menu Function

Menu Function Adjustment

#	Action	Function Description	Funtion Adjustment	
1	Push "Menu" button 1st Time	 Show Current Brightness	 Click "Vol+" button to increase brightness (Or Drag by Touch)	 Click "Vol-" to decrease brightness(Or Drag by Touch)
2	Push "Menu" button 2nd Time	 Show current Volume	 Click "Vol+" button to increase volume(Or Drag by Touch)	 Click " Vol-" to decrease volume(Or Drag by Touch)
3	Push "Menu" button 3rd Time	 Show current Battery status		

Menu Function Adjustment

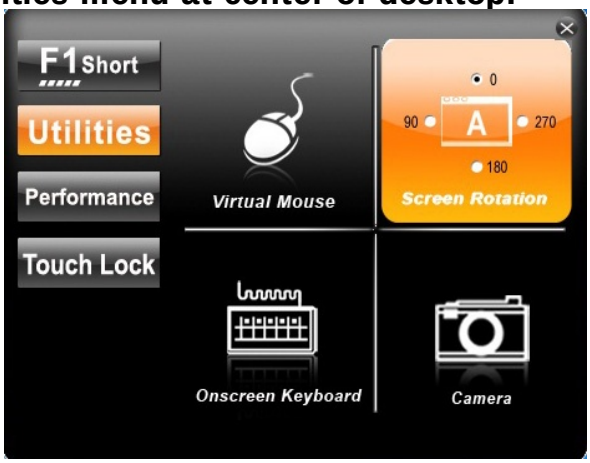
#	Action	Function Description	Funtion Adjustment
4	Push "Menu" button 4th Time		**Show current on/off of Wireless\ Bluetooth \ Camera and 3G\GPS mode.** **1. WiFi on/off** **2. Bluetooth on/off** **3. Camera on/off** **4. 3G on/off (Optional)** **5. GPS on/off (Optional)**
5	Push "Menu" button 5th Time	 **Show the system information**	**You can see the following:** **1. HotTab version** **2. Project ID** **3. BIOS version** **4. EC version**

2.2.2 How to use F1 (Hotkey) Function

F1 (Hotkey) Function

Use the HotTab software utility to make it easy to program and define hot key by customer's usual application.

Long press (3~4 seconds) the "F1" button on the top of your M970D and you can see the utilities menu at center of desktop.



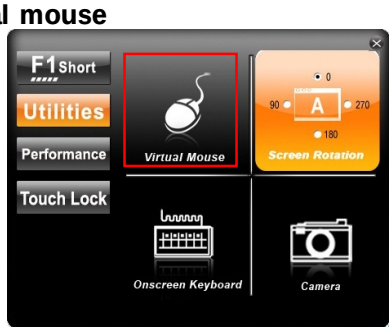
Then touch the "F1 Short" button.

Choose one software application as your hotkey function. After that, the software application which you set will open immediately when you short press "F1" button.

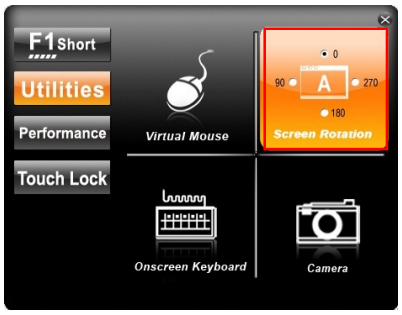
The Hotkey software program is the programmable application software for the Hotkey; we choose some usual applied function for default setup. For example, user can choose his own application program very easy by setting up the function from the setup window.

Utilities Function

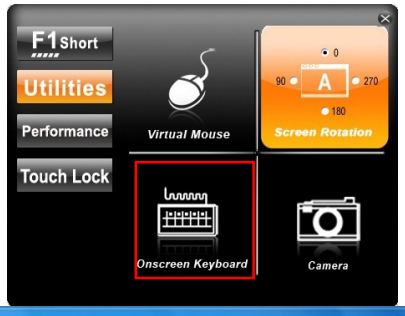
A. The first is virtual mouse

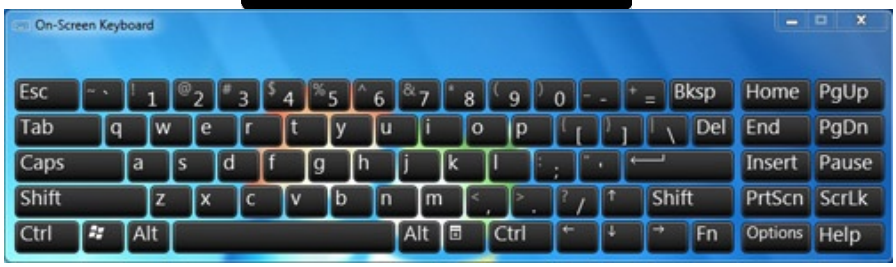


B. Screen rotation

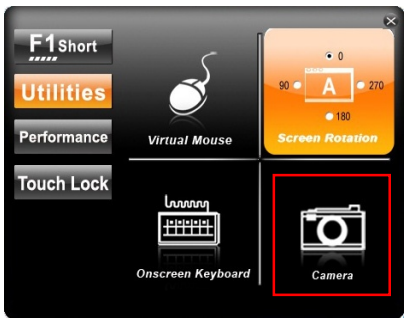


C. Onscreen Keyboard





D. Camera Function

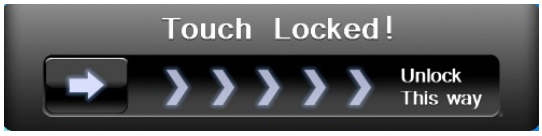


1. **F1 Short function key**
   You can set F1 button as a hotkey to open the programs listed on menu or use "Browse" and choose the execution program file.

2. **Power Manage function**

3. **Touch Lock**
   Touch "Touch Lock" button to lock the touch screen and all buttons on the tablet.

Drag right to unlock the touch screen and all buttons **on the tablet.**



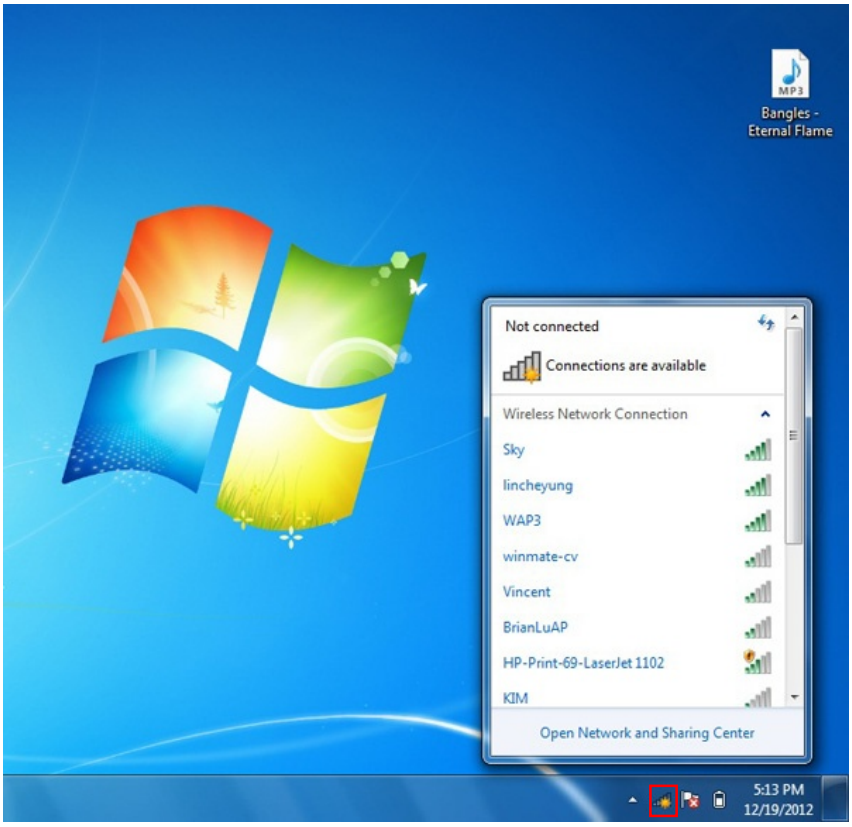
4. Low battery warning:
When the battery under 10%, system will show the battery low to remind you to change the new battery or insert adapter to charge.

2.2.3 Connecting to a Wireless Network

To connect to a wireless network:

1. Push "Menu" button 4 times and making sure the Wireless function is "On".

2. Please using the defult Windows Wireless Network Connection utility.

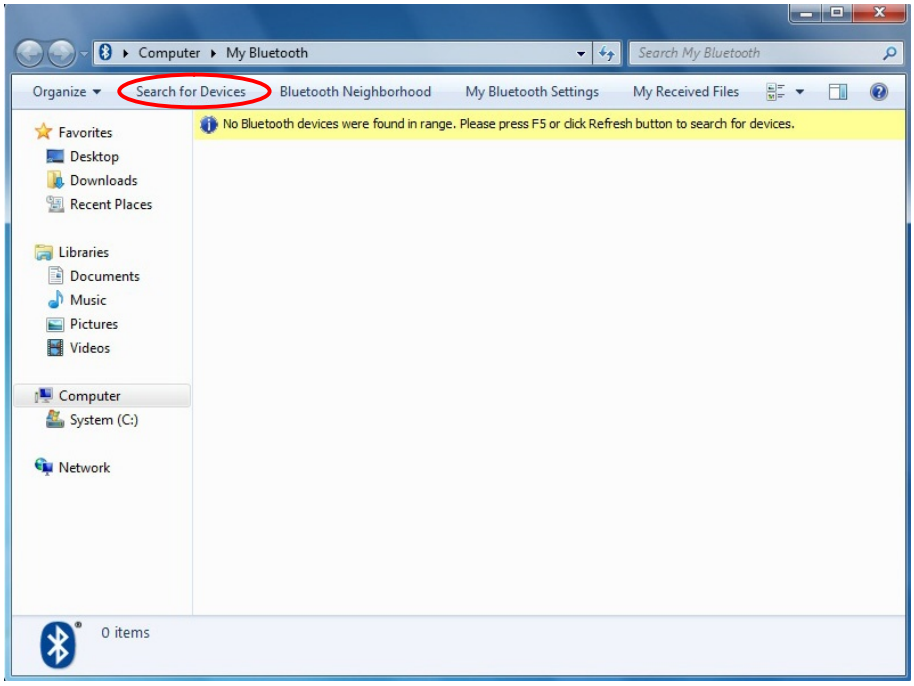


2.2.4 Using the Bluetooth Wireless Feature

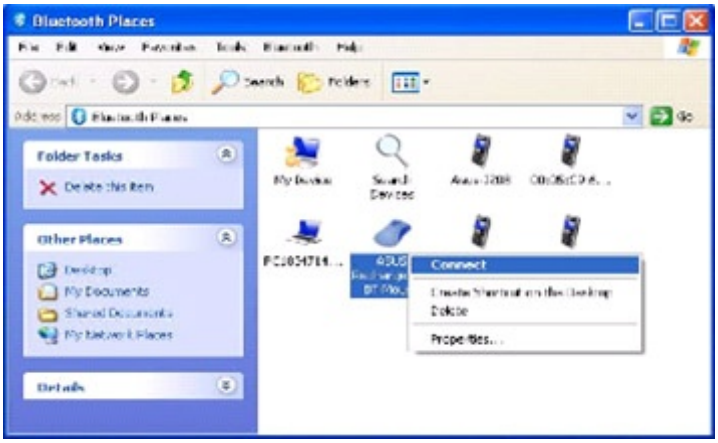
We apply Bluetooth 2.1+ EDR module for default function of the Tablet PC series. Depending on your application, the Bluetooth module can give you capability for short-range wireless communicaitons between devices without requiring a cable connection. The transmission can go through walls, pockets and briefcases as long as two devices are within range around 10 meters. Following the easy step to connect to the Bluetooth communication.

1. **Push "Menu" button 4 times and making sure the Bluetooth function is "On".**

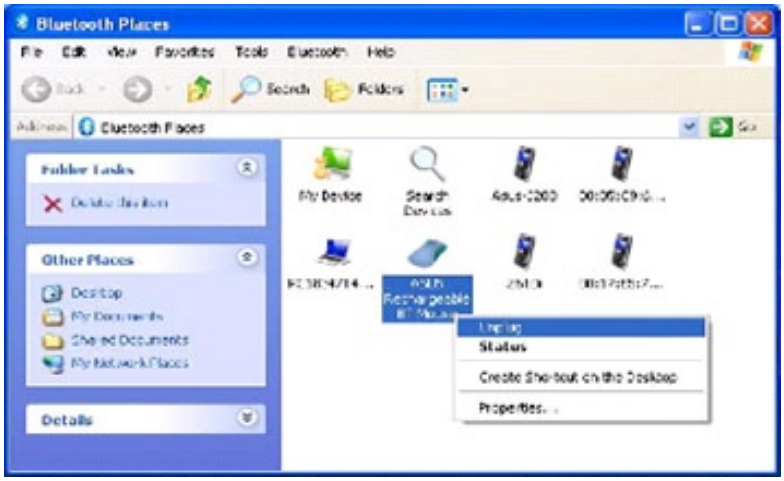
2. **Double click the Bluetooth shortcut and it will search any bluetooth device automatically. Or click "Search for Devices" to search again.**



3. **Choose the bluetooth device you want to connect, and left click to choose "Connect". Then the device will be connected to the module.**



4. **When under connecting, left click to check the connection status, or choose "Unplug" to remove the connection.**

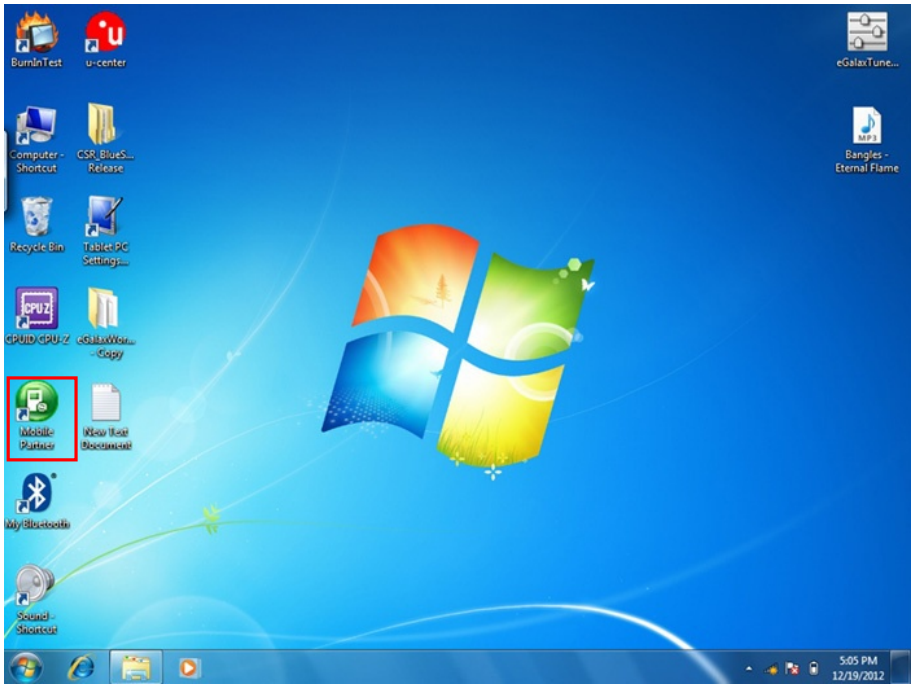


2.2.4 Using the 3G Feature (Optional)

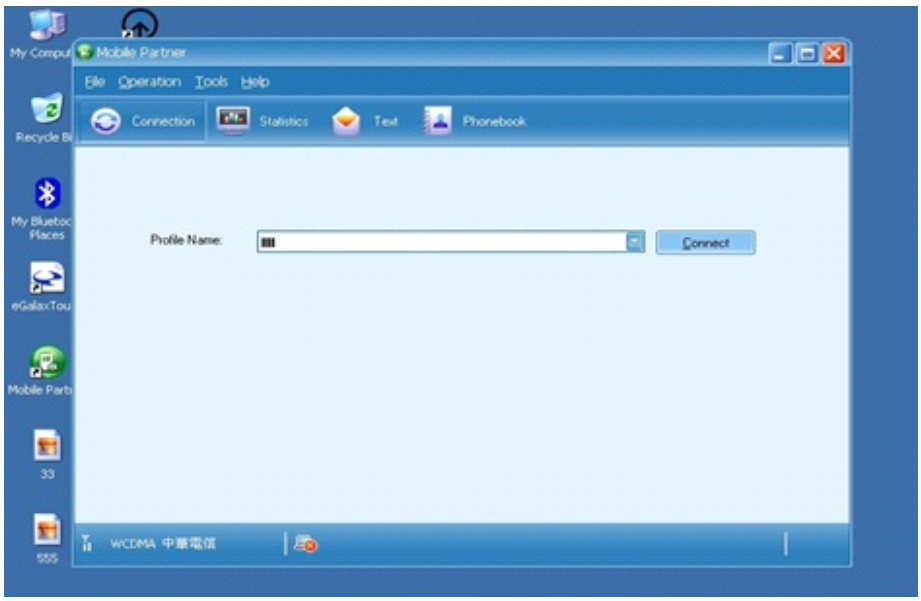
We apply a PCI Express® full size 3G module for optional function of the Tablet PC series. Depending on your application, the 3G module can datacard and host PC software combination deliver multiband CDMA2000® 1xEV-DO, UMTS, and GSM wireless wide area network (WWAN) connectivity in a single hardware configuration.

1. **Push "Menu" button 4 times and making sure the 3G Module is "On".**

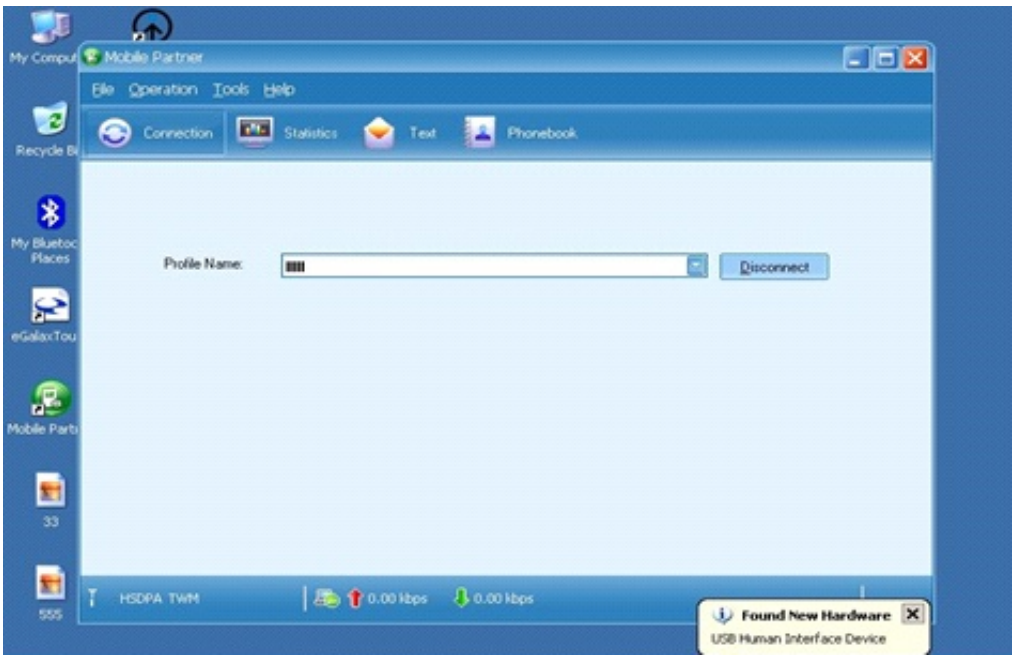
2. **Double click the shortcut of 3G application program (Mobile Partner) shown on screen.**

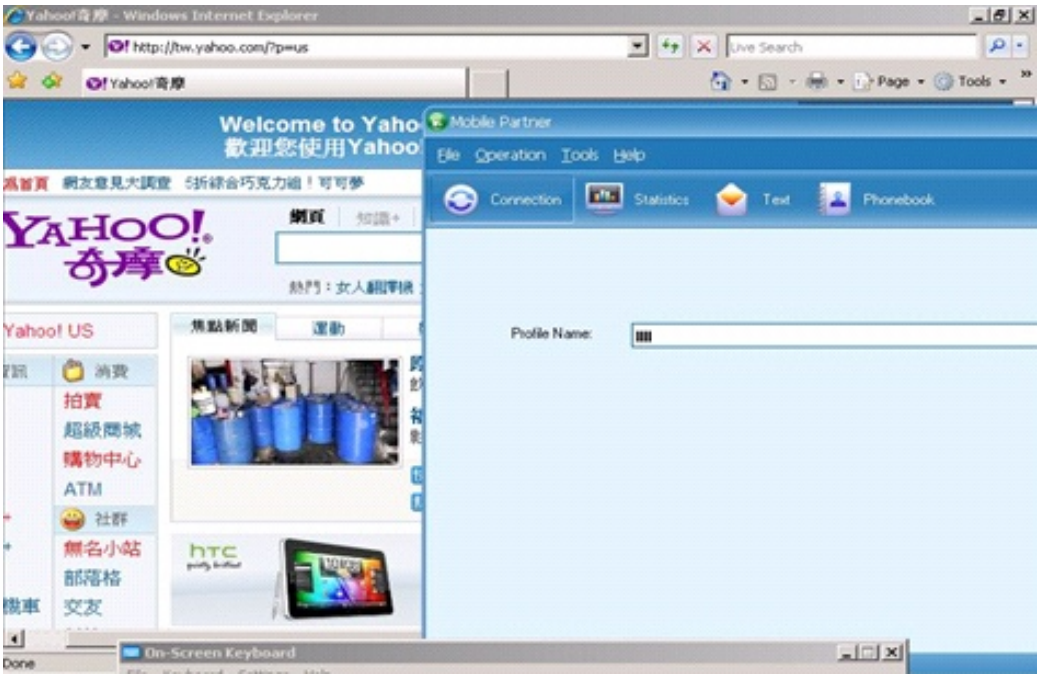


3. **Confirm whether to detect the telecommunications system operators, then press the "Connect" connect to 3G networks.**



4. After initialization is completed, it will automatically connect to 3G networks.



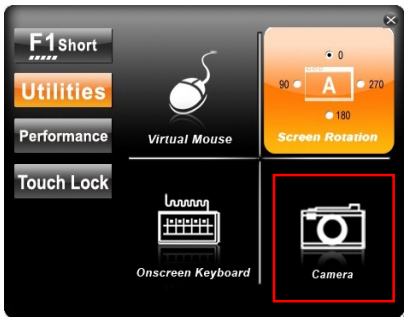


2.2.6 Using the Camera Feature

We apply a internal 2M Pixels Web Camera module for default function of the Tablet PC series.

1. **Push "Menu" button 4 times and making sure the Camera function is "On".**

2. **Press "F1" button about 5 seconds to into the HotTab utilities menu. Then choose the camera function.**



3. **Click the** **icon to record a video.**

   Click the **icon to take a picture.**

   Click the **icon to change the flashlight mode.**

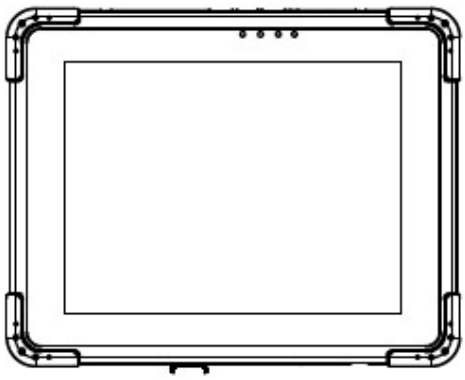
   Click the **icon to open the setting menu.**

   Click the **icon to close the camera.**

*** Default picture & video save path: C:\Webcam**

CHAPTER 3

Tablet PC Power Management



CHAPTER 3 TABLET PC POWER MANAGEMENT

3.1 About AC Adapter

Our Tablet PC support one set of AC adapter and power cord by country area. Please contact with your dealer for appropriate power cord if necessary.

****Caution**

1. **When you disconnect the AC adapter, disconnect from the electrical outlet first and then from the tablet PC. A reverse procedure may damage the AC adapter or tablet PC.**
2. **Always hold the plug head when you unplug the connector, never pull out the cord.**
3. **The AC adapter is designed for use with your tablet PC only. Connecting the AC adapter to another device can damage the adapter.**

The adapter operates on any voltage in the range of 100~240 V AC. The AC adapter serves as a converter from AC (Alternating Current) to DC (Direct Current) power because the tablet PC runs on DC power input, but an electrical outlet usually provides AC power.

3.2 Charging and Checking Charging Status

3.2.1 Charging the Battery Pack

The battery pack is the internal power source for the tablet PC. It is rechargeable using the AC adapter. The operating time of a fully charged battery pack depends on how you are using the tablet PC. When your applications often access peripherals, you will experience a shorter operating time.

NOTE:

1. **Charging will not start if the battery's temperature is below 0 °C (32 °F). It is also recommended not to charge the battery when temperature is above 45 °C (113 °F)**

2. **To prevent damage, the charging process may stop and the Battery Charge Indicator flashes red when the environmental temperature gets above 55 °C (131°F)**

3.2.3 Charging Approaches

There is one way recommended to charge the battery pack. By connecting the AC adapter to the tablet PC and an electrical outlet, the Battery Charge Indicator on the tablet PC glowed orange to indicate that charging is in progress. You are advised to keep the tablet PC power off while the battery is being charged. When the battery is fully charged, the Battery Charge Indicator glows green.

CAUTION:

1. **After the tablet PC has been fully recharged, do not immediately disconnect and reconnect the AC adapter to charge it again. The above-mentioned may damage the battery.**
2. **During charging, do not disconnect the AC adapter before the battery has been fully charged; otherwise you will get a prematurely charged battery.**

3.2.3 Checking the Battery Level

Any battery level indication is an estimated result. The actual operating time can be different from the estimated time, depending on how you are using the tablet PC.

In Windows operating system, you can check the approximate battery level using the battery meter function. To read the battery level in Windows, click the icon on the taskbar. (Click the icon if the tablet PC is using AC power.)

3.2.4 Battery Low Signals and Actions

Battery Low occurs when the battery has approximately 10 % (Windows default setting) of its charge remaining. The tablet PC's Battery Charge Indicator ( ) blinks red to alert you take actions.

NOTICE:

You can set up the Battery Low threshold and signals under Windows. Immediately save your data upon Battery Low. The remaining operating time depends on how you are using the tablet PC. If you are using the audio subsystem, hard or USB flash disk, the battery might run out of charge very quickly.

CAUTION:

1. **If you do not take any action, the tablet PC will automatically hibernate and turn off.**
2. **If you fail to save your data when the battery completely runs out of charge, then you will lose your data.**

3.3 Power Management

The Tablet PC supports ACPI (Advanced Configuration and Power Interface) for power management. The power management feature allows you to reduce the power consumption for energy saving. With an ACPI-compliant operating system such as Windows XP, power supply to different tablet PC components is controlled on an as-needed basis. This allows maximum power conservation and performance at the same time. In general, Windows' power management works in following state:

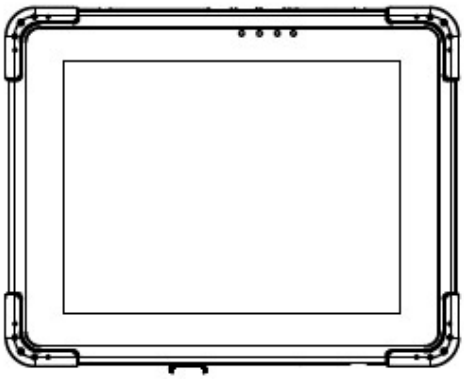
Occurrence	Condition
Power to the hard disk is turned off	When the hard disk has been idle for a set period.
Power to the display is turned off	When the display has been idle for a set period. When the entire system has been idle for a set period.
The tablet PC enters the Standby mode. The hard disk and display are turned off and the entire system consumes less power.	When the display has been idle for a set period. When you press the power button. *
The tablet PC enters the Hibernation mode.	When the entire system has been idle for a set period When you press the power button. *

*** Depends on your settings in Windows.**

For detailed information on power management, see Windows′ Help.

CHAPTER 4

Expanding Your Tablet PC



CHAPTER 4 EXPANDING YOUR TABLET PC

4.1 How and When to Use BIOS Setup

For enter to the Tablet PC BIOS setup, you need to connect with an external USB keyboard, press "Del" key when the prompt appears on the screen during start up. The prompt screen shows only few seconds so need press Del key quickly.

****NOTICE**

Updated BIOS version may be published after the manual is released. Check with the latest version of BIOS on website.

You may need to run BIOS setup utility when the below status.

1. **Error message on sreen indicate to check BIOS setup.**
2. **Restoring the factory default settings.**
3. **Modifing the specific hardware specification**
4. **Want to optimize the specification.**

In order to control the keyboard to select BIOS utility setup, you need

Keyboard Icon	Function Description
⬅ ➡	Selects a menu title.
⬆ ⬇	Selects an item or option.
Enter	Go to the sub-menu when available. Opens or closes the option window when an item is selected.
Esc	To leave sub-menu and return to main menu.

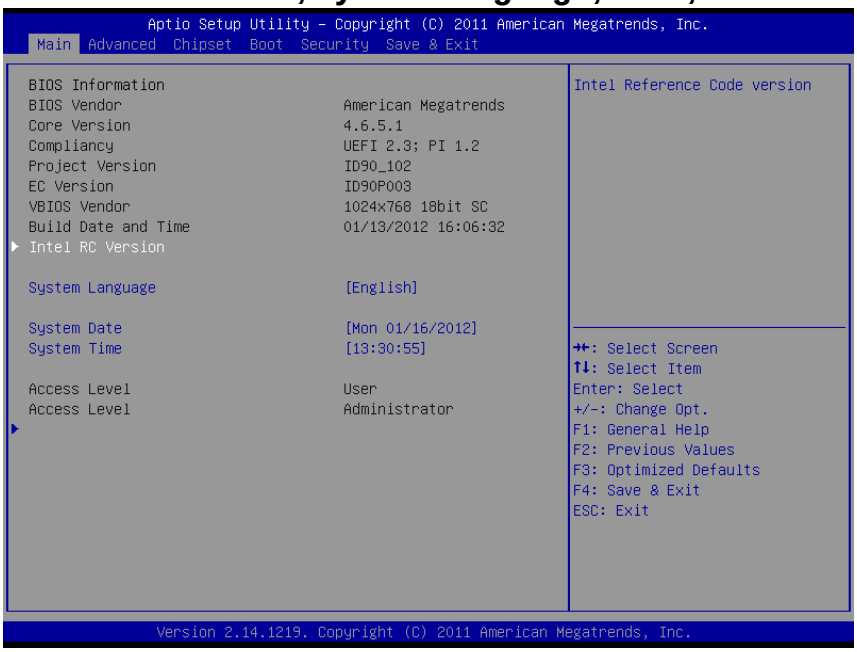
****NOTICE**

You can press the F1, F2, F3, F4, -/+, and Esc keys by connecting a USB keyboard to your tablet PC. Make sure that the item "Legacy USB Support" under the Main menu is set at Enabled (default).

4.2 BIOS Functions

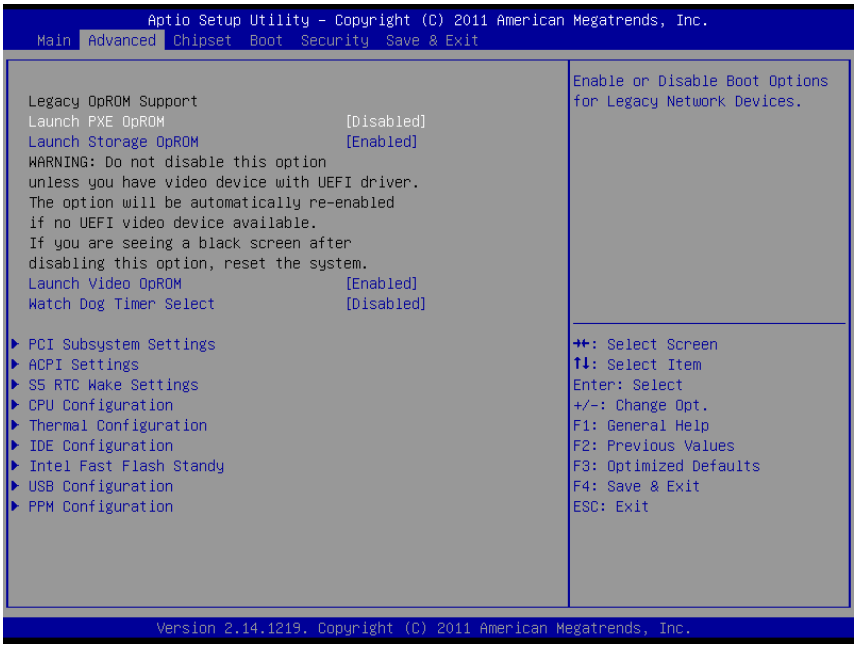
4.2.1 Main Menu

The Main menu contains the information of the Tablet system including BIOS version, processor RC version, system language, time, and date.

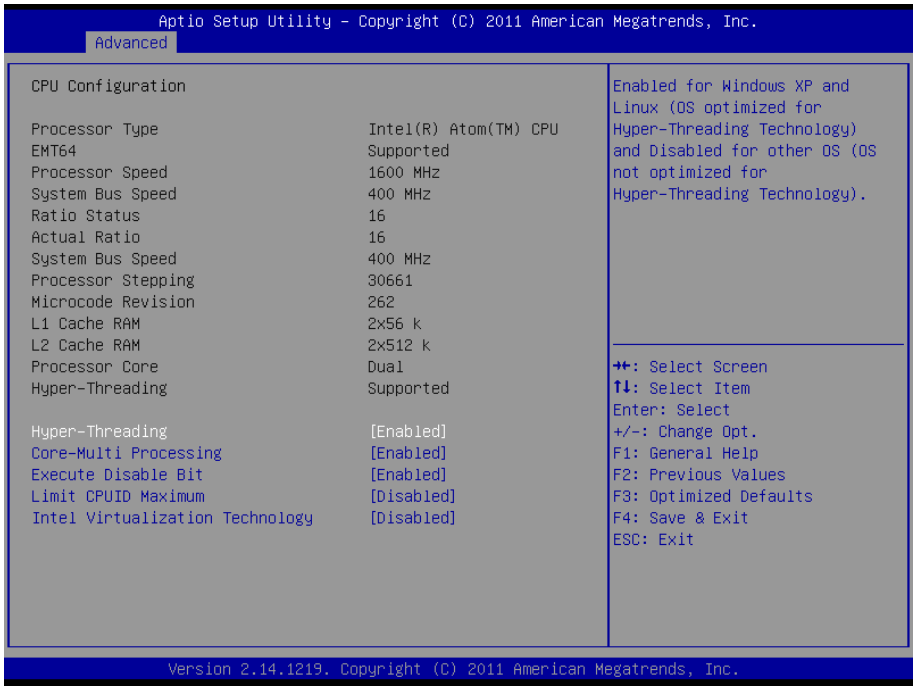


4.2.2 Advanced Menu

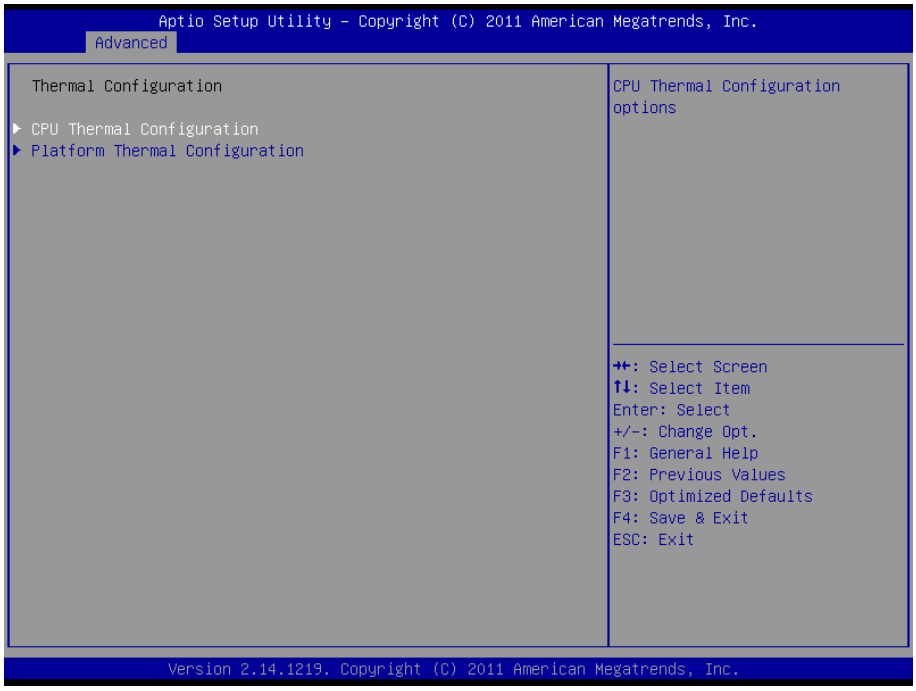
The Advanced menu contains the selections of PXE OpROM and Watch Dog Timer, and the settings of PCI Subsystem, ACPI, and S5 RTC Wake. Besides, it also contains the configuration information of CPU, Thermal, IDE/SATA, USB, and PPM Configuration.


Aptio Setup Utility – Copyright (C) 2011 American Megatrends, Inc.
Main Advanced Chipset Boot Security Save & Exit
Legacy OpROM Support
Launch PXE OpROM [Disabled]
Launch Storage OpROM [Enabled]
WARNING: Do not disable this option
unless you have video device with UEFI driver.
The option will be automatically re-enabled
if no UEFI video device available.
If you are seeing a black screen after
disabling this option, reset the system.
Launch Video OpROM [Enabled]
Watch Dog Timer Select [Disabled]
PCI Subsystem Settings
ACPI Settings
S5 RTC Wake Settings
CPU Configuration
Thermal Configuration
IDE Configuration
Intel Fast Flash Standy
USB Configuration
PPM Configuration
Enable or Disable Boot Options
for Legacy Network Devices.
→←: Select Screen
↑↓: Select Item
Enter: Select
+/-: Change Opt.
F1: General Help
F2: Previous Values
F3: Optimized Defaults
F4: Save & Exit
ESC: Exit
Version 2.14.1219. Copyright (C) 2011 American Megatrends, Inc.

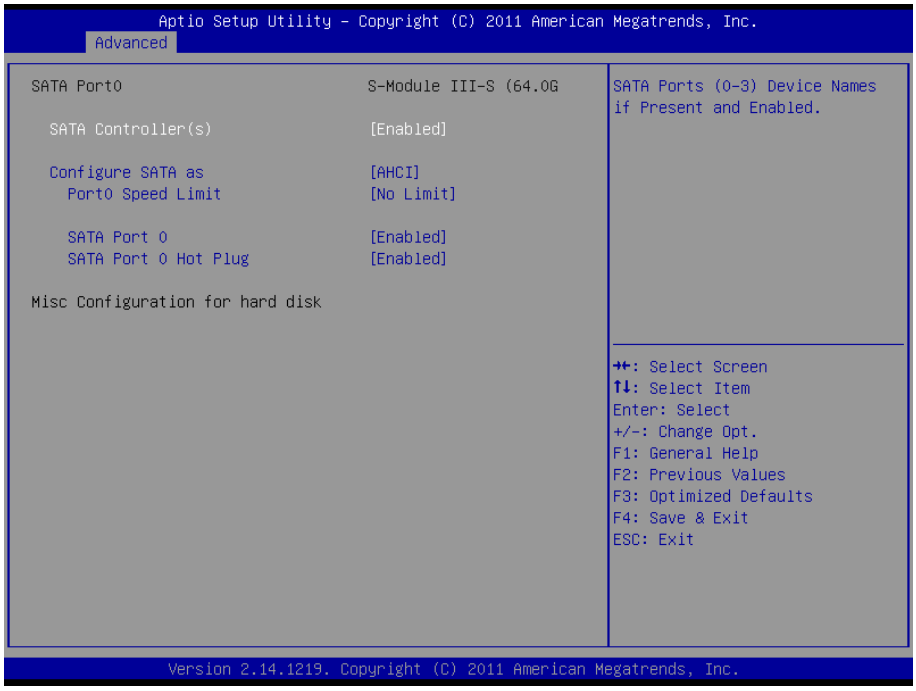
1. CPU Configuration


Aptio Setup Utility – Copyright (C) 2011 American Megatrends, Inc.
Advanced
CPU Configuration
Processor Type Intel(R) Atom(TM) CPU
EMT64 Supported
Processor Speed 1600 MHz
System Bus Speed 400 MHz
Ratio Status 16
Actual Ratio 16
System Bus Speed 400 MHz
Processor Stepping 30661
Microcode Revision 262
L1 Cache RAM 2x56 k
L2 Cache RAM 2x512 k
Processor Core Dual
Hyper-Threading Supported
Hyper-Threading [Enabled]
Core-Multi Processing [Enabled]
Execute Disable Bit [Enabled]
Limit CPUID Maximum [Disabled]
Intel Virtualization Technology [Disabled]
Enabled for Windows XP and Linux (OS optimized for Hyper-Threading Technology) and Disabled for other OS (OS not optimized for Hyper-Threading Technology).
→←: Select Screen
↑↓: Select Item
Enter: Select
+/-: Change Opt.
F1: General Help
F2: Previous Values
F3: Optimized Defaults
F4: Save & Exit
ESC: Exit
Version 2.14.1219. Copyright (C) 2011 American Megatrends, Inc.

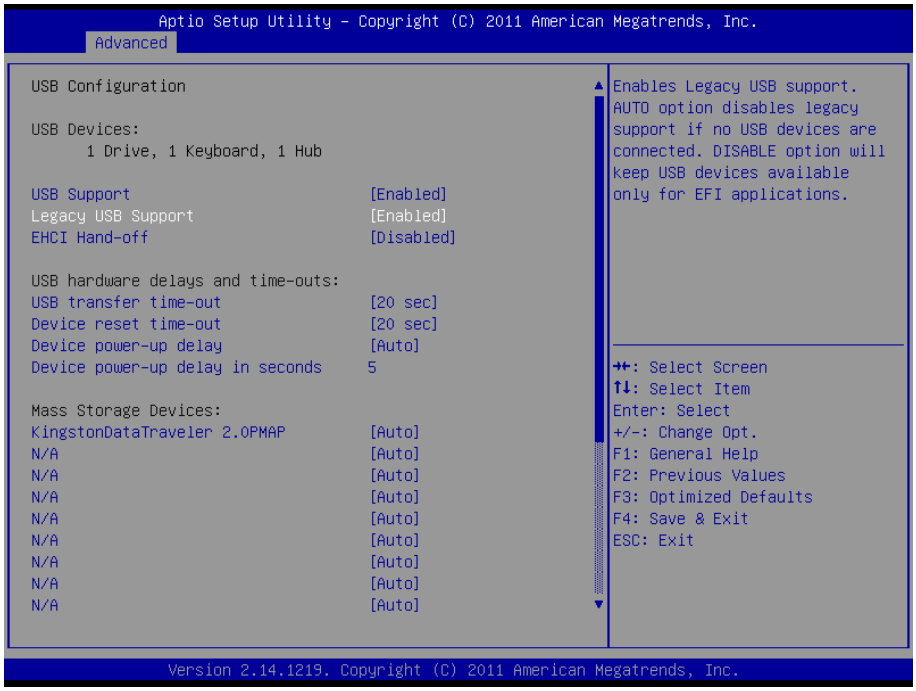
2. Thermal Configuration



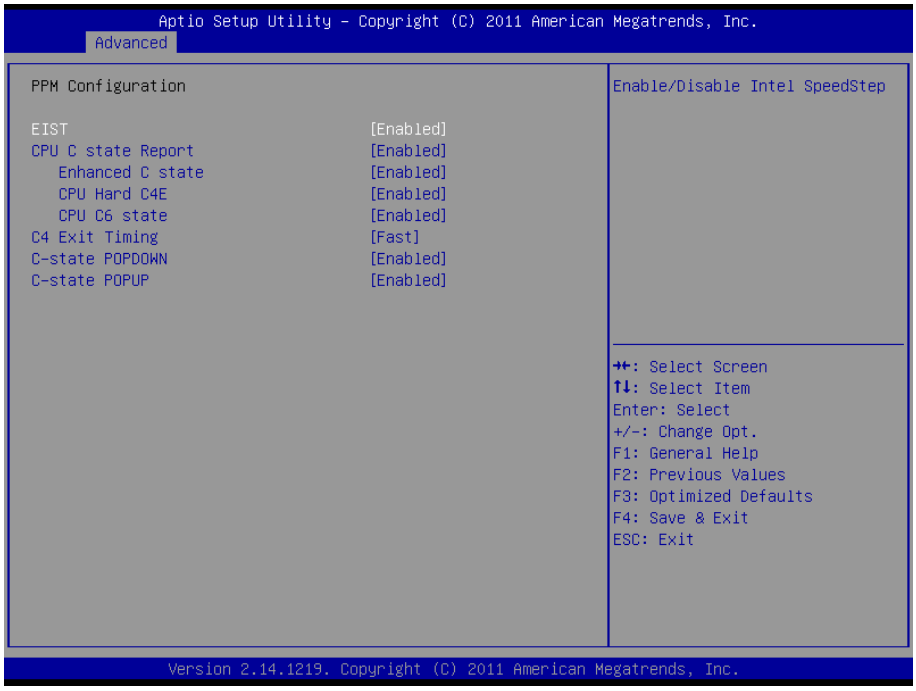
3. IDE / SATA Configuration


Aptio Setup Utility – Copyright (C) 2011 American Megatrends, Inc.
Advanced
SATA Port0 S-Module III-S (64.0G
SATA Controller(s) [Enabled]
Configure SATA as [AHCI]
Port0 Speed Limit [No Limit]
SATA Port 0 [Enabled]
SATA Port 0 Hot Plug [Enabled]
Misc Configuration for hard disk
SATA Ports (0-3) Device Names if Present and Enabled.
→←: Select Screen
↑↓: Select Item
Enter: Select
+/-: Change Opt.
F1: General Help
F2: Previous Values
F3: Optimized Defaults
F4: Save & Exit
ESC: Exit
Version 2.14.1219. Copyright (C) 2011 American Megatrends, Inc.

4. USB Configuration

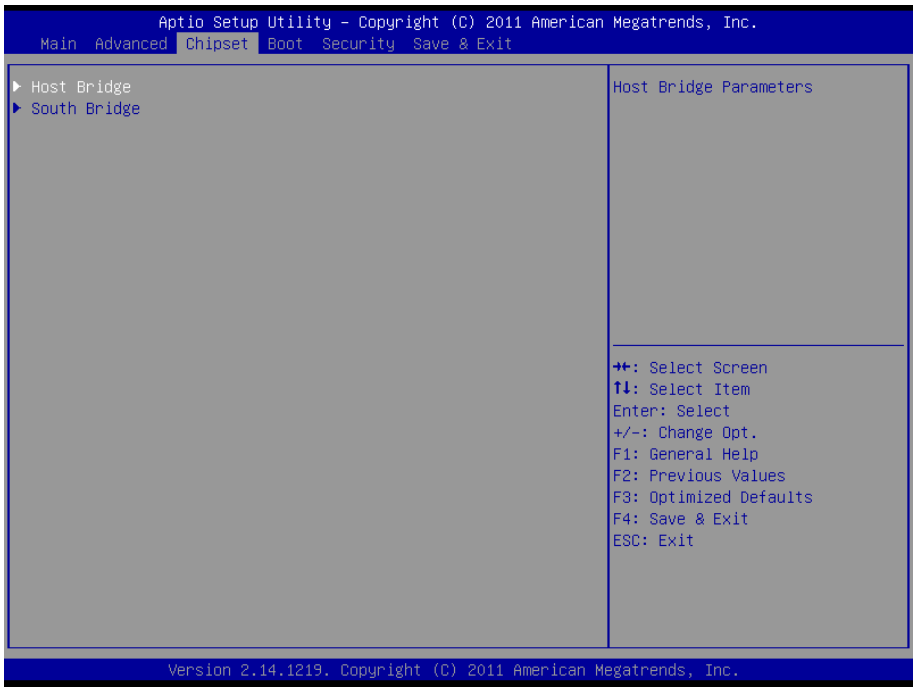

Aptio Setup Utility – Copyright (C) 2011 American Megatrends, Inc.
Advanced
USB Configuration
USB Devices:
1 Drive, 1 Keyboard, 1 Hub
USB Support [Enabled]
Legacy USB Support [Enabled]
EHCI Hand-off [Disabled]
USB hardware delays and time-outs:
USB transfer time-out [20 sec]
Device reset time-out [20 sec]
Device power-up delay [Auto]
Device power-up delay in seconds 5
Mass Storage Devices:
KingstonDataTraveler 2.0PMAP [Auto]
N/A [Auto]
N/A [Auto]
N/A [Auto]
N/A [Auto]
N/A [Auto]
N/A [Auto]
N/A [Auto]
N/A [Auto]
Enables Legacy USB support. AUTO option disables legacy support if no USB devices are connected. DISABLE option will keep USB devices available only for EFI applications.
→←: Select Screen
↑↓: Select Item
Enter: Select
+/-: Change Opt.
F1: General Help
F2: Previous Values
F3: Optimized Defaults
F4: Save & Exit
ESC: Exit
Version 2.14.1219. Copyright (C) 2011 American Megatrends, Inc.

5. PPM Configuration



4.2.3 Chipset Menu

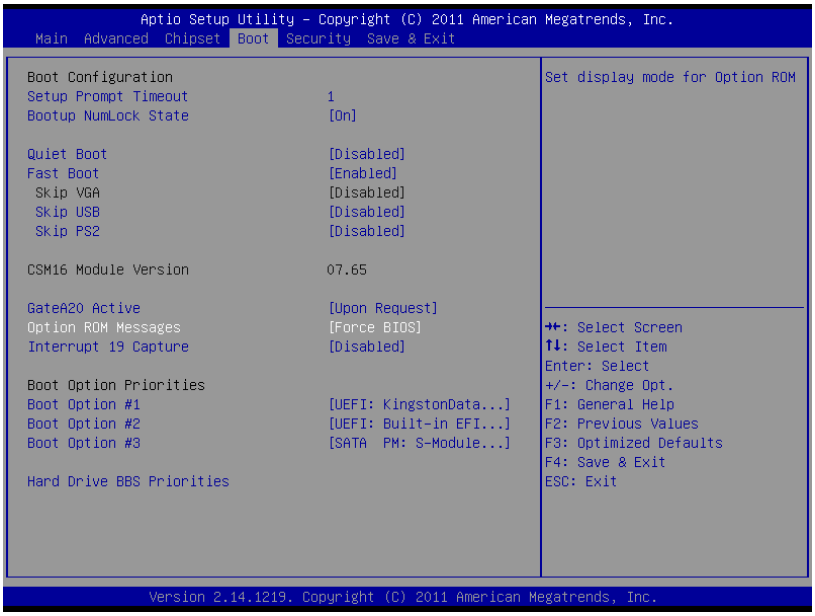
The Chipset menu contains the information of Host Bridge and South Bridge.



4.2.4 Boot Menu

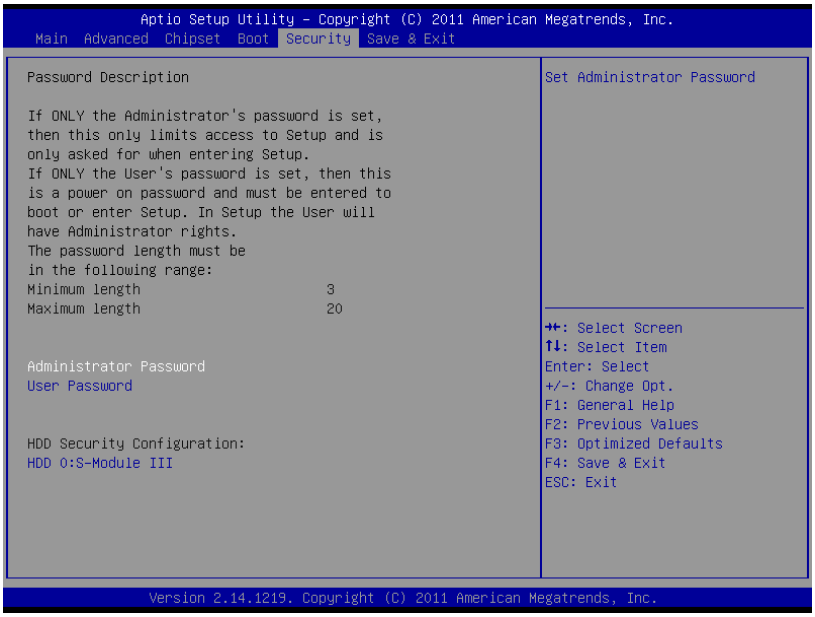
The Boot menu sets the sequence of the devices to be searched for the operating system.

The bootable devices will be automatically detected during POST and shown here, allowing you to set the sequence that the BIOS uses to look for a boot device from which to load the operating system. A brief description of button usage is listed next:


Aptio Setup Utility – Copyright (C) 2011 American Megatrends, Inc.
Main Advanced Chipset Boot Security Save & Exit
Boot Configuration
Setup Prompt Timeout 1
Bootup NumLock State [On]
Quiet Boot [Disabled]
Fast Boot [Enabled]
Skip VGA [Disabled]
Skip USB [Disabled]
Skip PS2 [Disabled]
CSM16 Module Version 07.65
GateA20 Active [Upon Request]
Option ROM Messages [Force BIOS]
Interrupt 19 Capture [Disabled]
Boot Option Priorities
Boot Option #1 [UEFI: KingstonData...]
Boot Option #2 [UEFI: Built-in EFI...]
Boot Option #3 [SATA PM: S-Module...]
Hard Drive BBS Priorities
Set display mode for Option ROM
→←: Select Screen
↑↓: Select Item
Enter: Select
+/-: Change Opt.
F1: General Help
F2: Previous Values
F3: Optimized Defaults
F4: Save & Exit
ESC: Exit
Version 2.14.1219. Copyright (C) 2011 American Megatrends, Inc.

4.2.5 Security Menu

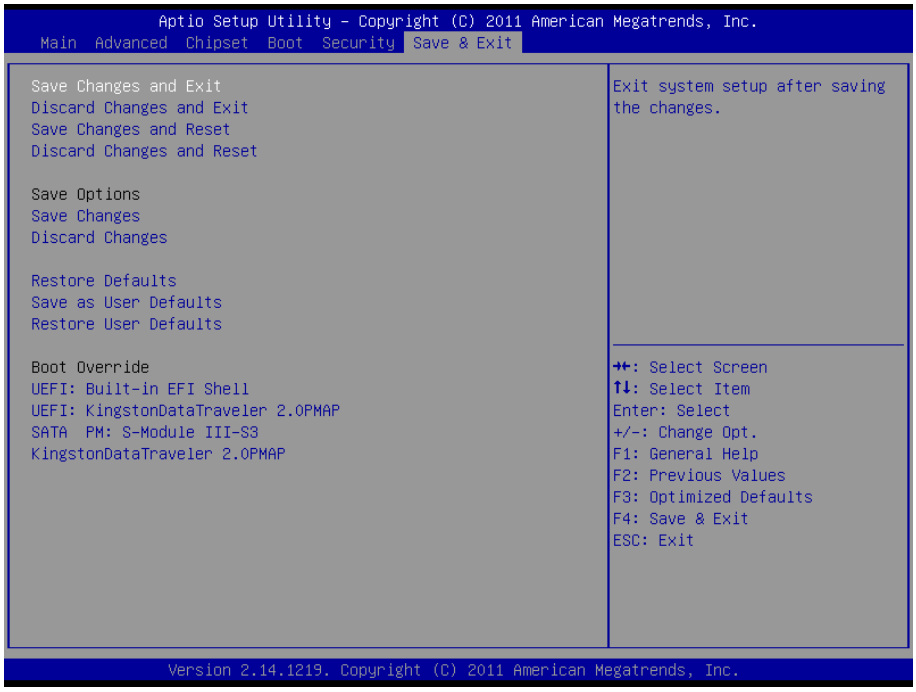
In the Security menu, users can set Administrator Password, User Passwaord, and HDD Security Configuration.


Aptio Setup Utility – Copyright (C) 2011 American Megatrends, Inc.
Main Advanced Chipset Boot Security Save & Exit
Password Description
If ONLY the Administrator's password is set,
then this only limits access to Setup and is
only asked for when entering Setup.
If ONLY the User's password is set, then this
is a power on password and must be entered to
boot or enter Setup. In Setup the User will
have Administrator rights.
The password length must be
in the following range:
Minimum length 3
Maximum length 20
Administrator Password
User Password
HDD Security Configuration:
HDD 0:S-Module III
Set Administrator Password
→←: Select Screen
↑↓: Select Item
Enter: Select
+/-: Change Opt.
F1: General Help
F2: Previous Values
F3: Optimized Defaults
F4: Save & Exit
ESC: Exit
Version 2.14.1219. Copyright (C) 2011 American Megatrends, Inc.

4.2.6 Save & Exit Menu

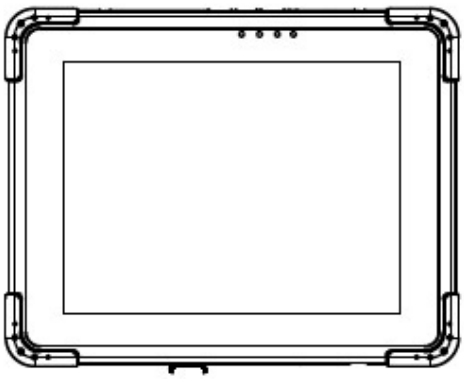
The Exit menu displays ways of exiting BIOS Setup utility. After finishing with your settings, you must save and exit so that the changes can take effect.

Save Canges and Exit saves the changes you have made and exits BIOS Setup utility.
Discarding Changes and Exit exits BIOS Setup utility without saving the changes you have made.
Save Canges and Rest saves the changes you have made and resets BIOS system.
Discarding Changes and Reset resets BIOS system without saving the changes you have made.
Save Changes done so far to any of the setup options.
Discard Changes done so far to any of the setup options.
Resotre Defaults loads/restore the factory default values for all the items.
Save as User Defaults saves the changes one so far as User Defaults.
Restore User Defaults loads/restore the User default values for all the items.



CHAPTER 5

How to use Recovery DVD



5.1 Hardware preparation

You need preparing follow items before start to recover your tablet.

a. USB Keyboard x1

b. USB DVD-ROM Driver x1

c. USB HUB x1

●Connect a RDVD-ROM driver with RDVD inside & a keyboard to the USB hub

●Connect the USB hub to M970D's USB port.

●Make sure the RDVD-ROM driver has been recognized by the M970D tablet.

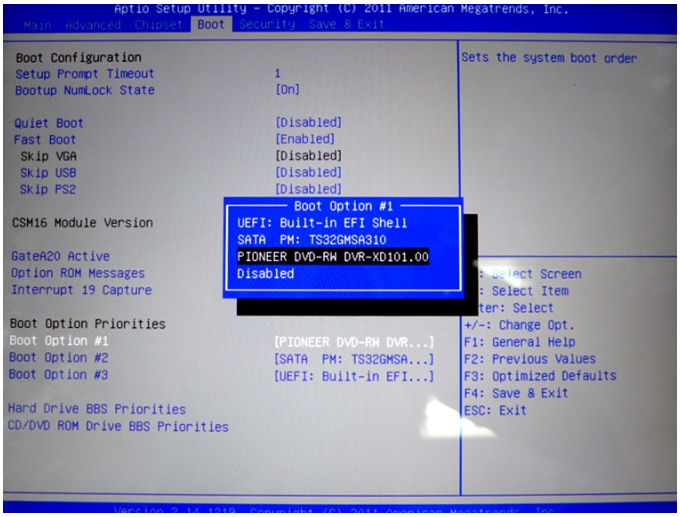
5.2 Start to recover the system by recovery DVD

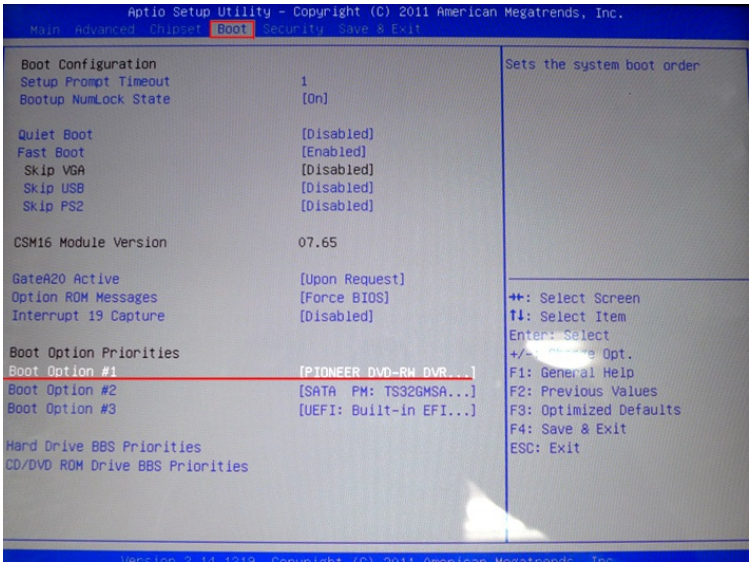
Step1.

Reboot your tablet, then press "delete key" on the keyboard to get into the bios setup mode.

Step2.

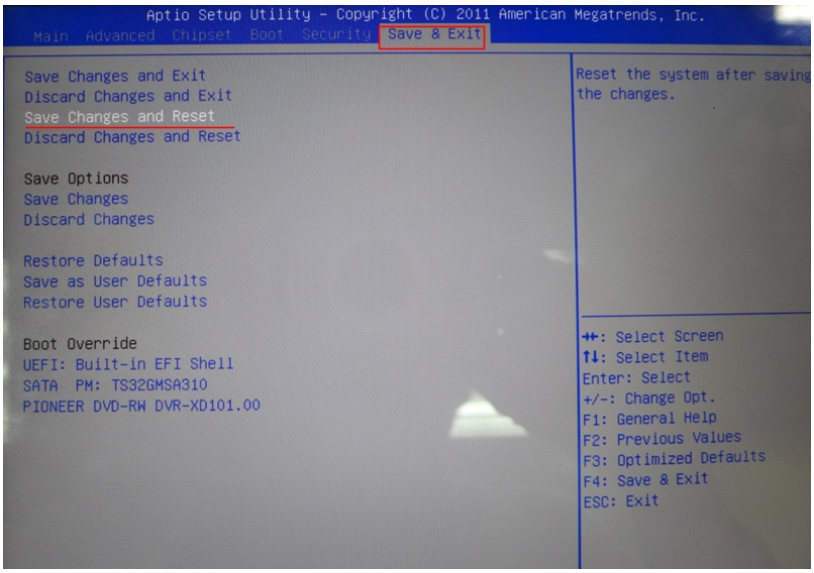
Set your DVD-ROM driver as the first priority of the boot device.




Aptio Setup Utility – Copyright (C) 2011 American Megatrends, Inc.
Main Advanced Chipset Boot Security Save & Exit
Boot Configuration
Setup Prompt Timeout 1
Bootup NumLock State [On]
Quiet Boot [Disabled]
Fast Boot [Enabled]
Skip VGA [Disabled]
Skip USB [Disabled]
Skip PS2 [Disabled]
CSM16 Module Version 07.65
GateA20 Active [Upon Request]
Option ROM Messages [Force BIOS]
Interrupt 19 Capture [Disabled]
Boot Option Priorities
Boot Option #1 [PIONEER DVD-RW DVR...]
Boot Option #2 [SATA PM: TS32GMSA...]
Boot Option #3 [UEFI: Built-in EFI...]
Hard Drive BBS Priorities
CD/DVD ROM Drive BBS Priorities
Sets the system boot order
F1: General Help
F2: Previous Values
F3: Optimized Defaults
F4: Save & Exit
ESC: Exit

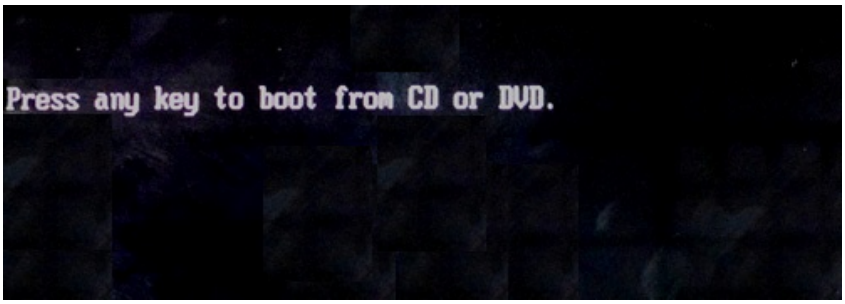
Step3.

Choose "Save Changes and Rest" under "save & Exit" tag.



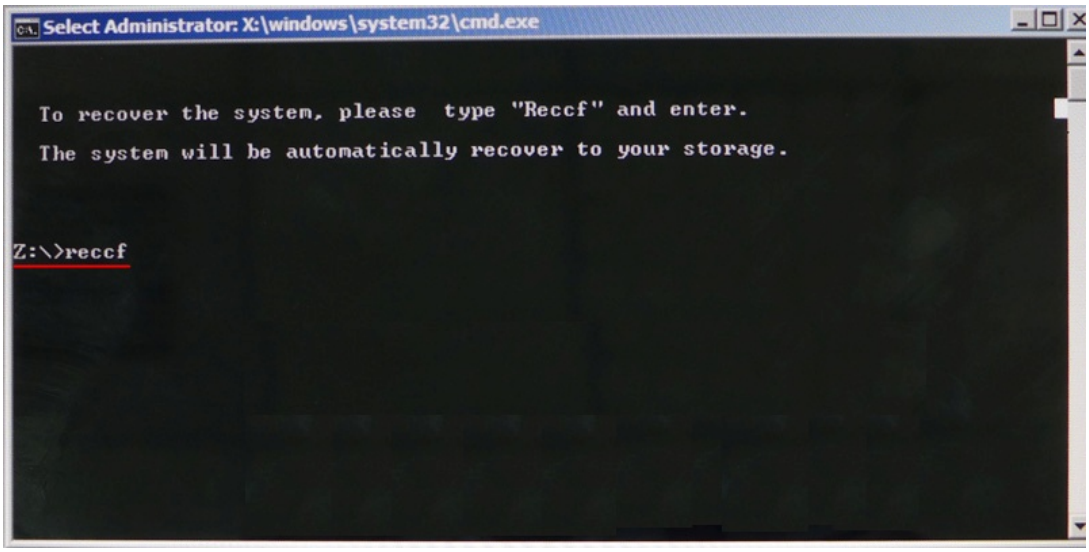
Step4.

Your tablet will reboot again. Then press any key on your keyboard when you see the following.



Step5.

Your will get a DOS window and then type "reccf"


Select Administrator: X:\windows\system32\cmd.exe
To recover the system, please type "Reccf" and enter.
The system will be automatically recover to your storage.
Z:\>reccf

Step6.

The recovery process will be started automatically.